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| <br>Application No. | Applicant(s)  |
|---------------------|---------------|
| 09/897,290          | SHIN, JI SEOP |
| Examiner            | Art Unit      |
| Jack Chiang         | 2642          |

| <b>√</b> | Rejected |  |
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| _ | (Through numeral)<br>Cancelled |
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| ÷ | Restricted                     |

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| ı | Interference |

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| Cla                  | im       | Date     |               |          |          | Date Claim Date |          |                 |               |          |             |          |                 |                 |          |                 | 1        | Cl      | aim     |              |   | _                    |          | Date     | ate      |    |          |     |           |          |            |   |  |  |  |
|----------------------|----------|----------|---------------|----------|----------|-----------------|----------|-----------------|---------------|----------|-------------|----------|-----------------|-----------------|----------|-----------------|----------|---------|---------|--------------|---|----------------------|----------|----------|----------|----|----------|-----|-----------|----------|------------|---|--|--|--|
|                      |          | 11/18/04 |               |          |          |                 |          |                 | $\dashv$      |          |             |          | Т               | Т               | Ť        | Ť               | $\top$   | Т       | Т       | 1            |   |                      | П        |          |          | Γ. |          |     | П         | $\neg$   |            |   |  |  |  |
|                      | Original | 9        |               | - [      |          | 1               |          |                 |               |          | <del></del> | Original |                 |                 |          |                 |          |         |         |              |   |                      | Original |          |          |    |          |     |           | Ιİ       |            |   |  |  |  |
| Final                | igi      | 8        |               |          |          |                 |          |                 |               |          | Final       | <u>.</u> |                 |                 | - 1      |                 | - 1      | ĺ       |         |              |   | Final                | į        | i l      |          |    |          |     |           |          | l          |   |  |  |  |
| "                    | ŏ        | =        |               |          |          |                 |          |                 |               |          | "           | ō        |                 |                 |          |                 |          |         |         |              |   | "                    | ŏ        |          |          |    |          | 1   |           |          |            |   |  |  |  |
|                      |          | 1        | $\perp$       | _        |          |                 |          |                 |               | 4        |             |          | Ш               | _               | _        | _               | $\perp$  |         | _       |              | 1 |                      |          |          |          |    |          | _   | ļ         | L        |            |   |  |  |  |
|                      | _1       | 4        |               |          |          |                 |          |                 |               |          | L           | 51       | $\perp$         |                 |          |                 |          | $\perp$ |         |              | ] |                      | 101      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 2        | 1        |               |          |          |                 |          |                 |               |          |             | 52       | [               |                 |          |                 | - 1      |         |         |              |   | 1                    | 102      |          |          |    | ,        |     |           |          |            |   |  |  |  |
|                      | 3        | V        |               |          |          |                 |          |                 |               |          |             | 53       |                 |                 |          | П               |          |         |         |              | 1 |                      | 103      |          |          |    |          |     |           | П        | $\neg$     |   |  |  |  |
|                      | 4        | 1        |               | T        |          |                 |          |                 |               | 7        |             | 54       |                 | $\neg \uparrow$ | $\neg$   | $\neg \uparrow$ | T        |         | Ť       | 1            | 1 |                      | 104      |          |          |    |          |     |           | П        | $\neg$     |   |  |  |  |
|                      | 5        | 1        | $\neg$        |          | _        | _               |          |                 |               | 1        |             | 55       |                 |                 |          | $\neg +$        | $\dashv$ | $\top$  | T       |              | 1 |                      | 105      |          |          |    |          | ٠., | -         |          | 一          |   |  |  |  |
|                      | 6        | Ì        | $\dashv$      | $\dashv$ |          | $\dashv$        |          | -               | $\dashv$      | _        | <u> </u>    | 56       | H               | -               | _        |                 | $\dashv$ | +       | +       | +            | 1 |                      | 106      | $\neg$   |          |    | _        | _   |           | H        | 一          |   |  |  |  |
|                      | 7        | 1        | $\rightarrow$ | $\dashv$ | $\dashv$ | _               |          | -               | -+            | -        | -           | 57       |                 | +               | -+       | -+              | $\dashv$ | +       | +       | -            | 1 |                      | 107      |          |          |    |          |     |           |          | $\dashv$   |   |  |  |  |
|                      | 8        | 1        |               |          |          |                 | _        |                 |               |          |             | 58       |                 | $\dashv$        | +        | $\dashv$        | +        | +       | +       | +            | ┨ | $\vdash$             | 108      | $\dashv$ | $\dashv$ |    |          |     |           |          | $\dashv$   |   |  |  |  |
|                      |          |          | -             |          |          |                 |          |                 |               | -        |             |          |                 |                 | +        | $\dashv$        | +        | +       |         | +            | ł |                      | 100      | -        | -        |    |          | _   | $\vdash$  | $\vdash$ | $\dashv$   |   |  |  |  |
| -                    | 9        | 1        | $\dashv$      |          |          | $\rightarrow$   | _        |                 | $\perp$       | 4        | -           | 59       | $\vdash \vdash$ | -+              | 4        | -               |          |         | +       | -            | 4 | $\vdash$             | 109      | -        | _        |    |          | L.  |           |          | $\dashv$   |   |  |  |  |
|                      | 10       | 1        | $\rightarrow$ | _        | _        | $\sqcup$        |          | $\Box$          | $\perp$       | 4        | <u> </u>    | 60       | $\sqcup$        | _               | _        | _+              | $\perp$  | $\bot$  | +       | 1            |   | ┝─┤                  | 110      | _        |          |    | <u> </u> | L   | ļ         | $\sqcup$ |            |   |  |  |  |
| $\square$            | 11       | 1        |               |          |          |                 |          |                 | $\perp$       | 4        | <u></u>     | 61       | Ш               | $\perp$         |          | $\perp$         | $\perp$  | _       | $\perp$ | 1            | Į |                      | 111      |          |          |    | L        |     |           | Ш        |            |   |  |  |  |
| <u> </u>             | 12       | L        |               |          |          |                 |          |                 |               | _        |             | 62       |                 | $\perp$         | $\perp$  |                 |          |         | $\perp$ |              |   |                      | 112      |          |          |    |          |     |           | Ш        |            |   |  |  |  |
|                      | 13       |          |               |          |          |                 |          | $oxed{oxed}$    |               |          |             | 63       |                 |                 |          |                 | $\Box$   |         | $\perp$ |              | ] |                      | 113      | ]        | I        |    | LĨ       |     | LĪ        | LT       | T          |   |  |  |  |
|                      | 14       |          |               |          |          |                 |          |                 | T             |          |             | 64       |                 |                 | T        |                 | $\Box$   | T       |         |              |   |                      | 114      |          |          |    |          | -   |           |          |            |   |  |  |  |
|                      | 15       |          |               |          |          |                 |          |                 |               |          |             | 65       |                 |                 | $\dashv$ |                 | 1        | 1       | T       | 1            | 1 |                      | 115      |          | $\neg$   |    |          |     |           | П        | $\dashv$   | _ |  |  |  |
|                      | 16       | _        |               |          |          | $\neg$          |          |                 |               | 7        |             | 66       | $\sqcap$        | $\dashv$        | $\dashv$ | $\dashv$        | $\top$   | $\top$  | $\top$  | 1            | 1 |                      | 116      | $\neg$   | $\neg$   | _  | T        |     | $\Box$    | П        | $\dashv$   | _ |  |  |  |
|                      | 17       |          | -             | $\dashv$ |          | $\dashv$        | $\dashv$ |                 | $\dashv$      | $\dashv$ |             | 67       | $\vdash$        | $\dashv$        | $\dashv$ | $\dashv$        | +        | +       | +       | +            | 1 | $\vdash$             | 117      | $\dashv$ |          |    | $\vdash$ | _   |           | H        |            |   |  |  |  |
|                      | 18       | $\vdash$ | $\dashv$      | +        |          | $\dashv$        | -        |                 |               | $\dashv$ | -           | 68       | $\vdash$        | $\dashv$        | $\dashv$ | +               | +        | +       | +       | +            | ł | $\vdash$             | 118      |          |          |    | $\vdash$ | -   | -         | $\vdash$ | $\dashv$   |   |  |  |  |
| $\vdash$             | 19       | - 0      | $\dashv$      | -        | _        |                 |          |                 |               | $\dashv$ |             | 69       |                 |                 | +        | -+              | +        |         | +       | +            | ł |                      | 119      |          | $\dashv$ |    |          |     |           | -        | ᅱ          |   |  |  |  |
| <u> </u>             |          |          |               |          |          | _               |          | -               |               | -        |             | 99       |                 |                 | -        |                 |          |         | +       | -            | { |                      | 119      |          | $\dashv$ |    |          |     |           |          | -          |   |  |  |  |
|                      | 20       | ٠        | _             |          |          |                 |          |                 | -             | -        | <u> </u>    | 70       | Ш               |                 | 4        | _               | _        | _       | -       | -            | Į |                      | 120      |          | _        |    |          |     |           |          | _          | _ |  |  |  |
| L                    | 21       |          | $\rightarrow$ | _        | ļ        |                 |          |                 |               | _        | <u> </u>    | 71       |                 |                 | 4        | _               |          | 4       |         | 1_           | 1 |                      | 121      |          | $\dashv$ |    | L        |     |           | $\perp$  | _          |   |  |  |  |
|                      | 22       |          | $\perp$       |          |          |                 |          |                 |               | _        |             | 72       |                 |                 | _        |                 |          | $\perp$ |         |              | ] |                      | 122      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 23       |          |               |          | _        |                 |          |                 |               |          |             | 73       |                 |                 |          |                 |          |         |         |              |   |                      | 123      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 24       |          |               |          |          |                 |          |                 |               |          | L           | 74       | l l             |                 |          |                 |          |         |         |              | 1 |                      | 124      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 25       |          |               |          |          |                 |          |                 |               |          |             | 75       |                 |                 | Т        |                 | Т        | 7       |         |              | 1 |                      | 125      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 26       |          |               | T        |          |                 |          |                 |               |          |             | 76       | П               |                 | T        |                 |          | $\top$  |         | 1            | 1 |                      | 126      |          |          |    |          |     | -         |          | $\neg$     |   |  |  |  |
|                      | 27       |          |               |          |          |                 |          |                 |               | ヿ        |             | 77       | П               |                 | _        |                 |          | _       | 1       | 1            | 1 |                      | 127      |          | $\dashv$ |    |          |     |           |          | ┪          |   |  |  |  |
|                      | 28       |          |               | 1        | コ        |                 | $\neg$   |                 |               | _        |             | 78       |                 |                 | 十        | 十               | $\neg$   | $\top$  | +       | +            | 1 |                      | 128      |          | -1       |    | Н        |     | _         |          | $\neg$     |   |  |  |  |
|                      | 29       |          |               | +        | _        | 1               | $\Box$   |                 |               | ┪.       |             | 79       | $\vdash$        |                 | $\dashv$ | $\dashv$        | $\pm$    | +       | +-      | +-           | 1 |                      | 129      |          | -        | _  | $\vdash$ |     | -         |          | $\dashv$   |   |  |  |  |
|                      | 30       | $\vdash$ | $\dashv$      | -        | $\dashv$ | -               | $\vdash$ | $\vdash$        |               | -        | -           | 80       | $\vdash$        | +               | +        |                 | -        | +       | ╁       | +            | ł | $\vdash$             | 130      | -        | -        | _  | -        | _   |           | $\vdash$ | $\dashv$   | _ |  |  |  |
|                      |          |          | -             | -        | -        | -               | $\vdash$ |                 |               | -        | -           |          | $\vdash$        | -+              | -+       | -+              | -        | +       | ╀       | ┽            | ł |                      |          |          |          |    | $\vdash$ |     | _         |          |            |   |  |  |  |
| $\vdash$             | 31       | $\vdash$ | $\dashv$      | -        | $\dashv$ |                 | $\vdash$ | $\vdash$        | $\dashv$      | $\dashv$ |             | 81       | $\vdash \vdash$ | $\dashv$        | +        | +               | +        | +       | +       | +            | 1 | $\vdash\vdash$       | 131      | $\sqcup$ |          |    | Ш        |     | <b> </b>  | $\vdash$ | $\dashv$   |   |  |  |  |
| $\vdash$             | 32       | $\vdash$ | _             | _        | _        |                 | Ш        | $\vdash \vdash$ |               | 4        |             | 82       | $\sqcup$        |                 | $\dashv$ | -               | -        | +       | +       | +-           | 1 | $\vdash \vdash$      | 132      |          | ļ        |    | Ш        |     | <u> </u>  | $\sqcup$ | _          |   |  |  |  |
|                      | 33       | $\sqcup$ |               | _        | _        | _               | Ш        | $\sqcup$        |               | 4        | <u> </u>    | 83       | Ш               | ‡               | $\dashv$ | 4               | $\perp$  | _       | 1-      | <del> </del> |   | ш                    | 133      |          | _        |    |          |     |           | <b></b>  | _          |   |  |  |  |
|                      | 34       | Ш        |               | _        | _        |                 |          | $\sqcup$        |               | 4        |             | 84       | Ш               |                 | _        | $\perp$         | $\perp$  | $\perp$ | $\perp$ | 1_           |   |                      | 134      |          |          |    |          |     |           | Ш        |            |   |  |  |  |
|                      | 35       |          |               | $\perp$  |          |                 |          |                 |               | _        |             | 85       | Ш               | $\perp$ L       |          |                 |          |         |         |              | ] |                      | 135      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 36       |          |               |          |          |                 |          |                 | $\Box \bot$   |          |             | 86       |                 | $_{ m I}$       | _T       | _T              | _[       |         |         |              |   |                      | 136      |          |          |    |          |     |           |          |            |   |  |  |  |
|                      | 37       |          |               |          | _7       |                 |          | ╚┨              | $_{\perp}$ T  |          |             | 87       | П               | $\top$          | T        | T               | $\top$   | T       | Τ       |              | ] |                      | 137      |          |          |    |          |     |           |          | $\neg$     |   |  |  |  |
|                      | 38       |          |               |          | $\neg$   |                 |          |                 | $\neg$        | 1        |             | 88       | $\sqcap$        |                 | 寸        | $\top$          | $\top$   | _       | Τ       | 1            | 1 |                      | 138      |          |          |    | П        |     |           |          | $\neg$     |   |  |  |  |
|                      | 39       |          |               | $\dashv$ |          |                 |          | $\Box$          | $\neg$        | 1        |             | 89       | $\Box$          | $\top$          | $\top$   | $\top$          | $\top$   | +       | $\top$  | †            | 1 |                      | 139      |          | ᅥ        |    | Н        |     |           | Ħ        | $\neg$     |   |  |  |  |
| $\vdash$             | 40       |          |               | -        |          |                 | П        | $\vdash$        |               | 7        |             | 90       | $\vdash$        | $\overline{}$   | -+       | $\dashv$        | +        | +       | +       | +            | 1 | $\vdash$             | 140      |          |          | -  | Н        |     | Ι-        | H        | $\dashv$   | - |  |  |  |
|                      | 41       |          | _             | 一        |          | -               | $\vdash$ | $\vdash \dashv$ |               | $\dashv$ |             | 91       | $\vdash$        | $\dashv$        | +        | $\dashv$        | +        | +       | ╁       | +            | 1 | $\vdash$             | 141      | -        | $\dashv$ |    | $\vdash$ |     | -         | $\vdash$ |            |   |  |  |  |
|                      | 42       | $\vdash$ | $\dashv$      | $\dashv$ |          | $\vdash$        |          | $\vdash$        | $\dashv$      | $\dashv$ |             | 92       | $\vdash$        | $\dashv$        | $\dashv$ |                 | +        | +       | +       | +            | 1 | $\vdash\vdash\vdash$ | 142      |          | $\dashv$ | -  | Н        |     |           | ⊣        |            | — |  |  |  |
| $\vdash\vdash\vdash$ | 43       | $\vdash$ | $\dashv$      |          |          | $\vdash$        |          | $\vdash$        | +             | -        | <u> </u>    |          | $\vdash$        |                 | +        | +               | +        | +       | +-      | +-           | 1 |                      |          |          |          |    | Ш        |     |           |          |            |   |  |  |  |
| $\vdash$             |          |          |               |          |          |                 | $\vdash$ | $\vdash$        |               | $\dashv$ | <u> </u>    | 93       | $\vdash$        | -+              |          | -+              | -        | +       | +       | 4-           | 1 | <b>  </b>            | 143      |          |          |    | $\sqcup$ |     | _         | $\vdash$ |            |   |  |  |  |
| $\vdash$             | 44       |          |               | _        |          |                 | -        |                 |               | -        | <u> </u>    | 94       | Ш               | $\perp$         | 4        | _               | _        |         | _       | 1_           | 1 | $oxed{oxed}$         | 144      |          | $\dashv$ |    | Ш        |     |           | Ш        | $_{\perp}$ |   |  |  |  |
| Ш                    | 45       |          |               |          |          |                 |          | $\perp 1$       |               | _        | L           | 95       | Ш               |                 |          |                 |          | $\perp$ | $\perp$ |              |   |                      | 145      |          |          |    | L        |     | L         |          |            |   |  |  |  |
| igsquare             | 46       |          |               |          |          |                 |          |                 | $\perp$       |          | L           | 96       |                 | [               | _[       | $\Box$          |          | ╧       | $\perp$ |              |   |                      | 146      |          | T        |    |          |     |           |          | $\neg$     |   |  |  |  |
|                      | 47       |          |               |          |          |                 |          | LΤ              | T             |          |             | 97       |                 |                 | T        | T               | T        | T       | T       |              | 1 |                      | 147      |          | $\neg$   |    |          |     |           |          |            |   |  |  |  |
|                      | 48       |          |               | $\neg$   |          |                 |          | 1               | $\neg \vdash$ |          |             | 98       |                 |                 | $\top$   | $\top$          | _        | 1       | $\top$  | 1            | 1 |                      | 148      | _        | $\dashv$ |    |          |     |           | $\Box$   | 一          |   |  |  |  |
|                      | 49       |          |               |          |          |                 |          |                 | $\neg +$      | 7        |             | 99       | $\Box$          | $\dashv$        | $\dashv$ | $\dashv$        | +        | $\top$  | +       | +-           | 1 | $\vdash$             | 149      |          | -        | _  | Н        |     | -         | $\vdash$ | $\dashv$   |   |  |  |  |
| $\Box$               | 50       | H        | $\dashv$      |          |          |                 |          | $\vdash$        | $\top$        | 7        |             | 100      | $\vdash$        | $\dashv$        | $\dashv$ | $\dashv$        | +        | +       | +-      | +-           | 1 |                      | 150      | -        | -        |    | -        |     | _         | $\dashv$ | $\dashv$   |   |  |  |  |
|                      |          | ш        |               |          |          |                 |          |                 | L             |          | L           | . 50     | <u> </u>        | L               | L        |                 |          |         |         |              | J | Ц                    | 130      |          |          |    |          |     | لـــــــا |          |            |   |  |  |  |